Work Order ID 106213

August-28-13 12:56:54 PM

106213

Item ID: D2278 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Step Leg

Start Date: 8/28/13 **Start Qty:** 8.00 *8*

Required Date: 8/28/13 **Req'd Qty:** 8.00 *8*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLJ **Date:** 13-08-30 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D2278	Rev F								
100	FLOW WATER JET	0.00				10 8	0		JM13-10-26
100									
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D2278 Dwg Rev: F Prog Rev: F 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00				10 8	2		JM13-10-26
110									
QC	**Memo**	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00 DAS 27 ~~9-89~~				10			
120									
QC	**Memo**	0.00 B1028							
Quality Control									

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

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Required Date: 8/28/13 **Req'd Qty:** 8.00 *8* **Customer:**

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Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00				10		13-11-18	
130									
HandFinish	**Memo**	0.00							
Hand Finishing									
140	QC - Inspect Part Finish	0.00				10X			13/11/20 DAS 36 9-89
140									
QC	**Memo**	0.00							
Quality Control									
150	Identify as per dwg & Stock Location: 64	0.00				10X			13/11/20 DAS 36 9-89
150									
Packaging	**Memo**	0.00							
Packaging									

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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- Small Fab ☐
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- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
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- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
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- ☐ Power Loss/Surge
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- ☐ Temperature/Cure
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Work Order ID 106213

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August-28-13 12:56:54 PM

Item ID: D2278 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Step Leg

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Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00					13/11/21		
160									
QC	**Memo**	0.00							
Quality Control									

VB-11-20

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

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Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
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Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
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- ☐ Folio
- ☐ Grain
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- ☐ Mislabeled
- ☐ Misread
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- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

August-28-13 12:56:58 PM

Work Order ID: 106213 *106213*

Parent Item: D2278 *D2278*

Parent Item Name: Step Leg

Start Date: 8/28/13 **Required Date:** 8/28/13

Start Qty: 8.00 **Required Qty:** 8.00

Comments:
IPP Rev:A New Issue 05-11-07 JLM
IPP Rev:B Now 6061-T6 06-06-23 JLM
IPP Rev C New flat pattern 08.01.11 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.080		Purchased	No			100	sf	656.0000	0.9815	~~8.265263~~			
M6061T6S.080									**	10		JM13-10-26	
6061-T6 .080 Sheet													

Location	Loc Qty	Loc Code
MAT021	656	
125812	34	
m126309	363.5	
m126350	258.5	

126309
~~126350~~

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

DART AEROSPACE LTD	Work Order:	106213
Description: Leg	Part Number:	D2278
Inspection Dwg: D2278 Rev: F		Page 1 of 1

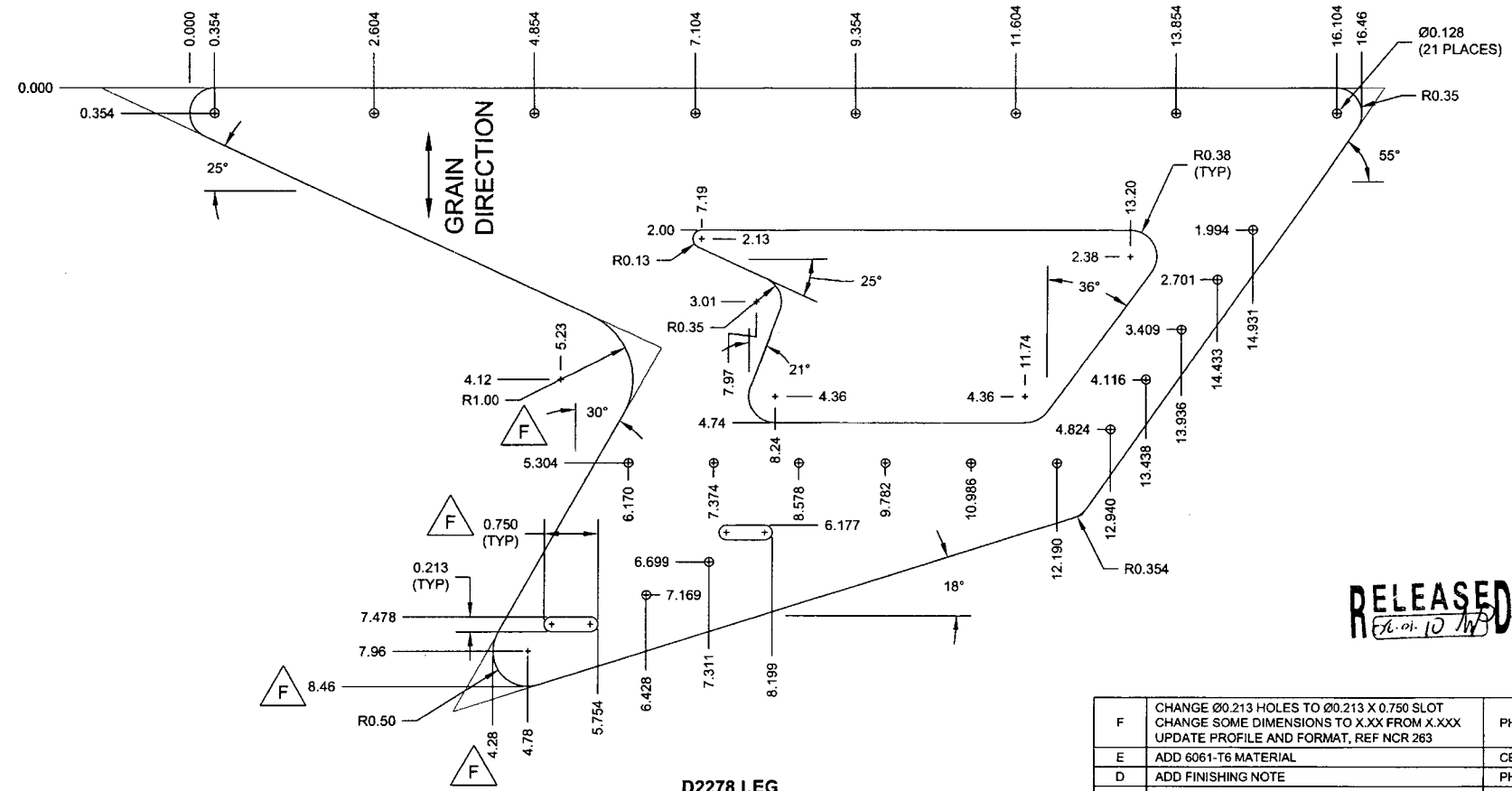
FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.354	+/-0.010	0.359"	–		U	JLM01
0.354	+/-0.010	0.358"	–		U	
16.46	+/-0.030	16.46"	–		T	JLM06
Ø0.128	+0.005/-0.000	0.128"	–		U	
R0.354	+/-0.030	0.354"	–		RG	
2.00	+/-0.030	2.007"	–		U	
4.74	+/-0.030	4.746"	–		U	
8.46	+/-0.030	8.469"	–		U	Probe102
0.213	+/-0.010	0.216"	–		U	
0.750	+/-0.010	0.752"	–		U	
0.080 thick	+/-0.010	0.080"	–		U	

Measured by:	JLM & JM	Audited by:	DAS 27 9-89	Prototype Approval:	N/A
Date:	13-10-26	Date:	13 10 28	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.10.12	New Issue P/O D2582	KJ/JLM	
B	06.03.08	Dwg Rev. changed	KJ/JLM	
C	06.06.23	Dwg Rev. changed	KJ/JLM	
D	08.02.28	Dimensions updated per Dwg Rev F	KJ/DD	



D2278 LEG

RELEASED

NOTES:

1) MATERIAL: 6061-T6 (OR -T62) ALUMINUM SHEET 0.080 THICK (PER QQ-A-250/11 OR AMS 4025/4027)
(REF DART SPEC M6061T6S.080)
OR
5052-H32 ALUMINUM SHEET 0.080 THICK (PER QQ-A-250/8 OR AMS 4016)
(REF DART SPEC M5052H32S.080)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.45 lbs

REV.	DESCRIPTION	BY	DATE
F	CHANGE Ø0.213 HOLES TO Ø0.213 X 0.750 SLOT CHANGE SOME DIMENSIONS TO X.XX FROM X.XXX UPDATE PROFILE AND FORMAT, REF NCR 263	PH	07.12.27
E	ADD 6061-T6 MATERIAL	CB	06.05.29
D	ADD FINISHING NOTE	PH	05.11.14
C	CHANGED RADIUS TO 0.354	BW	95.02.16
B	CHANGED TO MATCH SPACERS	BW	94.11.08
A	NEW ISSUE	BW	94.10.13

DESIGN		**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. D2278 — REV. F — SHEET 1 OF 1
MFG. APPR.		
APPROVED		TITLE LEG — SCALE 3:2
DE APPR.		
DATE	07.12.27	

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106213 MLJ
13-08-30